

24491

SIXTEENTH
ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

TO

The Education Committee

OF THE

SALOP COUNTY COUNCIL.

1923.

JAMES WHEATLEY, M.D., D.P.H.



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Medical Staff.

School Medical Officer:

JAMES WHEATLEY, M.D., D.P.H.

Assistant School Medical Officers:

KATHLEEN PRIESTLEY, L.S.A.

MABEL BLAKE, M.B., Ch.B.

ARTHUR D. SYMONS, M.D., D.P.H.

WILLIAM TAYLOR, M.D., D.P.H.

LESLIE WILSON EVANS, M.B., D.P.H. (commenced duties 12th September).

School Dentists:

STEPHEN KEENAN, L.D.S.

FRANK H. BIRCH, L.D.S. (commenced duties January 23rd).

To the Chairman and Members of the Salop Education Committee.

LADIES AND GENTLEMEN,

I beg to present my sixteenth Annual Report as Medical Officer to the Salop Local Education Authority.

The combined scheme of School Medical Inspection and Child Welfare has been further advanced and continues to work well.

By the appointment of Dr. L. W. Evans on September 12th the staff of School and Child Welfare Medical Officers was restored to its full complement of five.

The year has been one of consolidation of services started in previous years.

The dental scheme has continued to work well, and if properly followed up must have a far-reaching effect on the health of the people. From the date on which Mr. Miliaressis met with his fatal accident until January 23rd, when Mr. Birch was appointed, a period of ten weeks, the dental scheme was carried on with one dentist only. Since Mr. Birch's appointment the work has continued with its previous smoothness and efficiency. The establishment of a public dental service is an outstanding want and cannot be much longer delayed without destroying much of the benefit of school dental treatment.

The school clinics have continued to grow in usefulness and now form an important part of the scheme of medical inspection and treatment.

The great want mentioned in last year's report, viz., a comprehensive scheme of physical instruction and training has been partially met by the appointment of a very competent lady organiser to undertake the work for the County and the Borough.

The educational part of the scheme of medical inspection is receiving much attention, and I am confident that it will result in much good.

I am, Ladies and Gentlemen,

Your obedient Servant,

JAMES WHEATLEY,

County Medical Officer of Health,
and School Medical Officer.

County Buildings,
Shrewsbury.

May, 1924.

AREA COVERED BY THE SALOP LOCAL EDUCATION AUTHORITY, NUMBER OF SCHOOLS, DEPARTMENTS, AND CHILDREN ON REGISTER.

The area covered by the Salop Education Authority comprises 858,277 acres, and had a population at the 1921 census of 211,946. It is co-terminous with the Administrative County with the exception that the Borough of Shrewsbury is not included. The number of schools at the end of the year was 288, comprising 346 departments. The number of children on the registers necessarily varies from time to time to some extent. On December 21st, 1923, it was 30,849.

Shifnal Boys and Girls, and Ludlow East Hamlet Girls and Infants Schools were amalgamated in January, and Maesbury Council School replaced Maesbury C.E. and Maesbury Undenominational Schools in November.

HYGIENIC CONDITION OF SCHOOLS.

The reports of the Medical Inspectors show that there is much work waiting to be done to bring the schools up to a reasonable standard of fitness.

Only the grosser cases have in recent years been reported for action. There can be no doubt that the children are suffering in many ways, and it is hoped that in the near future a determined effort will be made to put the Schools in a really good condition.

Besides the lighting and ventilation of the school rooms, the provision of satisfactory desks, and of proper cloakroom, lavatory and sanitary accommodation, there is the question of the provision of satisfactory playgrounds, of a supply of pure water and suitable facilities for drinking at any time. A suitable playground is essential for physical instruction and for games. A field should always be obtained where possible and games organised for the children. The School playground is usually the only place where children get the opportunity of playing, particularly in rural districts where houses are scattered and the children only come together when at school.

Few things are more necessary for the true education and physical welfare of these children than provision of satisfactory playgrounds and the playing of games under proper supervision. This is a part of the education and welfare of the elementary school child that has been much neglected in the past. (See also chapter on physical training).

The above remarks appeared in my report for 1921. The paragraph on playing grounds was forwarded to the managers of the schools with the following remarks :—

“The Medical Inspection Committee of the Local Education Authority has observed with much pleasure that there are persons who have the interests of scholars so much at heart that they allow scholars to play games in fields and grounds belonging to them and that there are many Teachers who are equally interested and supervise the games out of school hours, showing the children how to play games. The School Medical Officer is of opinion that the playing of games under supervision is of great value from the standpoint of the physical well-being of the child, and the Committee agrees entirely with this view. The Committee would like to see the provision of accommodation for scholars' games much extended and it is hoped that Managers and Teachers will do all they can to influence those who have fields or grounds suitable and available for games to lend them for so desirable a purpose.”

With the appointment of an organiser of physical training, it is hoped that greater progress will be made in the provision of better facilities for exercises and games. She will be able to inquire into local conditions and possibilities and often perhaps to arrange informally for facilities otherwise difficult to obtain.

The provision of a satisfactory water supply with proper facilities for drinking and the encouragement of the children by the teachers to drink at the proper time is also a matter of great importance to the health of the children. At present children drink all sorts of concoctions brought to school in bottles, and owing to absence of facilities, many of the children undoubtedly do not drink sufficient water or drink at the proper time. Where there is not a wholesome supply of water laid on to a school and until such a supply is provided, it should be a duty of the school authority to see that an ample supply is carried each day to the school and stored in a covered vessel placed conveniently for access, and provided with a tap for drawing off. The supply should be ample for drinking and for washing the drinking utensils.

In many of the schools the desks are very unsatisfactory and are undoubtedly responsible for some of the minor deformities in the children. A serious effort should now be made to get rid of these old unsuitable desks.

EDUCATIONAL WORK OF MEDICAL OFFICERS.

This is being developed and should become a very powerful influence in public health education.

The following remarks appeared in my last year's report :—

In its final result, probably this is the most important work of the medical officers. It is essentially preventive, but, unfortunately, in its results, it cannot be stated in definite terms like the number of children inspected and treated. Being somewhat intangible and not being made a definite requirement of the Board of Education, it is apt to be to some extent overlooked. It calls for much thought, enthusiasm and energy on the part of the medical officers, and it also occupies a considerable amount of time. It is always the first work that suffers if the medical staff is insufficient.

The educational work here referred to may with advantage be dealt with in detail, as it affects the different groups of persons concerned with child life.

Teachers.—One becomes more and more impressed with the fact that comparatively little progress can be made in improving the hygiene of school life unless the teacher is thoroughly interested in the physical condition of the children and reasonably well informed concerning the important principles governing the health of the child. Many teachers have had no training in hygiene, but even those who have had this, need the constant advice and help of the School Medical Officers. The Medical Officer should, whenever time permits, talk to the teachers on some important branch of hygiene with the object of enabling them to maintain better school conditions, and to teach and train the children in healthy living. The school conditions here referred to are not only those connected with the construction and cleanliness of the school, but personal cleanliness, attitude of the body both at the desk and during standing and exercise, the prevention of mouth breathing, the suitability of the midday meal and how it should be eaten, the importance of spacing the children so as to minimise infection, and many other matters. These can be all illustrated by actual conditions in the schools or put in such a form that it can be embodied in the training of the children.

Medical officers will often find that a good plan is to go through and explain to the teachers the various leaflets on cleanliness, ventilation, prevention of decay of teeth, etc., that have been issued from time to time to them.

The teachers can utilise this knowledge not only in improving the general school hygiene, but in teaching and training the children. Matters like ventilation, warmth, cleanliness and other kindred things can be put in the hands of monitors to report upon and regulate so far as it is in their power. A daily inspection of cleanliness of the hands and clothes of the children is of great use as not only a means of enforcing cleanliness but of pointing out the value of cleanliness in promoting health. The mid day meal may be made the occasion for imparting and

exemplifying much valuable knowledge on food and how it should be eaten. The interval for play should be the time for showing the children the necessity for exercise sufficiently strenuous as to cause complete expansion of the chest and real exercise for the heart. The teachers should also see that the children develop a correct style of walking and running. It is upon this that the proper development of the arch of the foot depends and consequently to a considerable extent the activity and health or otherwise of the person throughout life. It should be pointed out that the interval for play is the time too, for water drinking, rather than at meal times. An ample supply of water should always be readily available for this purpose. A teacher will not do this work, nor is he in the position to do it unless he is stimulated and informed by the Medical Officer. Some years ago I lectured to most of the teachers in the County on the prevention of decay of teeth and with very good results, but it is essential that the main points in this work should be gone over with the teachers at least once a year.

Real progress, however, will not be made by teachers who do not recognise that the children as a whole are under their charge, and that there can be no true education unless the physical needs are properly met.

Parents.—A good deal can be done in talks to the parents. It is true that time for this work is limited and the hygienic advice that can with advantage be given is mostly such as is particularly applicable to the child under consideration. In most defective conditions, such as defects of eyes, nose and throat, teeth, general malnutrition, rheumatism and anaemia, the general advice that is necessary goes, however, far beyond the remedy of the particular defect. The advice, too, is much more apt to be acted upon, because it is given with special reference to the defect of their own child.

School Children.—Whenever time and other conditions permit, an opportunity should be taken for speaking to the older children on some health matter of importance.

School Nurses.—The opportunity should always be taken to see that the nurse benefits by attendance at school inspections. It may only be that she can listen to and absorb what is said to the parents, teachers or scholars: or the Medical Inspector may find time to talk to the nurse on some important matter of school or general hygiene. It must always be remembered that the nurses have not had a real grounding in hygiene based on physiology, and that this defect should be remedied by the School Medical Officer so far as lies in his power. The nurses in their turn have great opportunities in the homes of the people.

School Attendance Officers.—The training of these officers is a different matter and is directed to different ends. They can be of considerable help in preventing verminous conditions and in seeing that routine instructions for minor ailments, particularly skin conditions, are not neglected. The instruction of these officers can best be undertaken by their attendance on one occasion at Shrewsbury, when their duties, so far as they concern the health and cleanliness of the child, can be gone over in detail and thoroughly emphasised.

ARRANGEMENTS MADE FOR MEDICAL INSPECTION.

Medical inspection of elementary and secondary schools throughout the whole county, with the exception of the Borough of Shrewsbury, has been carried out by the whole-time officers, who, it is estimated, are engaged for about a quarter of their time in maternity and child welfare work. In addition to medical inspection one of the officers now undertakes the work of oculist for those districts where there is difficulty in getting the children to the Shrewsbury Eye, Ear and Throat Hospital.

Routine examinations have been made at the ages of 5, 8 and 12, and in addition the children under five and all children brought forward by the teacher or nurse have been examined.

The children found defective on previous occasions are re-examined at each inspection until declared well.

SCHOOL NURSES.—Eighty-six part-time nurses have been employed in connection with school departments ; 82 of these nurses are working for Associations connected with the Shropshire Nursing Federation ; 2 are nurses employed by other Associations or by private persons, and 2 are working on their own account.

Two whole-time school nurses deal with the schools in the urban and rural districts of Oswestry and Oakengates and the surrounding schools. The remainder of the schools in the County are divided amongst the health visitors, so that now all the schools with the exception of three small inaccessible schools on the Clee Hill, are included in the nursing scheme.

Number of children attended by—

District Nurses acting as School Nurses	..	..	16,355
Whole-time School Nurses	..	..	5,548
Health Visitors	..	..	7,166
Nurses working on their own account	..	..	2,190

VOLUNTARY HELPERS.—(see remarks, page 8, report for 1914).

During the war the scheme for utilising Voluntary Helpers became much less efficient, owing greatly to the fact that the helpers were fully employed with other work. Much of the routine work undertaken by the helpers is now done by the school nurses, but there is still work to be done in which helpers can be most useful. What is now wanted is one lady for a school or group of schools to whom the nurse can apply for advice or assistance.

Where the school nursing is done by the district nurses it would be a good plan to have the Secretary of the Local Nursing Association as a Voluntary Helper. A communication to this effect might with advantage be sent to the Shropshire Nursing Federation.

TEACHERS, ATTENDANCE OFFICERS AND SCHOOL ATTENDANCE.—(for details see page 9, report for 1914).

The teachers have continued to afford great help in the work of medical and dental inspection and treatment.

The value of the assistance that is given and the results achieved vary enormously in the different schools. It is all a question of the personal influence of the teacher and the interest taken in the physical condition of the children. In some schools, particularly some of the country schools, the word of the teacher is almost always accepted. The great disparity in the influence of teachers is nowhere more marked than in connection with the acceptance of dental treatment. Presumably all the teachers are satisfied of the enormous importance on health of dental treatment, and yet many of them cannot overcome the objections mostly arising from the children (see table, page 13.)

In the section dealing with verminous conditions, attention is called to the great influence that the teacher can exert to improve the cleanliness of the school children.

The Attendance Officers are now working in closer co-operation with the medical department. Their opportunities of seeing whether children absent from school on medical grounds are getting medical treatment, are often greater than the opportunities of the school nurse. They are now instructed to report at once any such children who are absent and are apparently not receiving or carrying out medical treatment, so that they can be further investigated if necessary by the medical department. They are also to report on children who are excluded by the Medical Inspector for various conditions and are not carrying out the treatment prescribed.

The percentage of parents attending the medical inspections fell off very materially during the war and has not recovered. It is very important that parents should attend and that the teachers should use every endeavour to get them there. At the same time one can hardly expect the same percentage of attendance now as at the commencement of medical inspection.

INSPECTION OF SECONDARY SCHOOLS.—The secondary schools, 18 in number, were visited three times during the year with two exceptions, where, owing to the small number of children for examination in the first term, two visits only were made. Entrants, leavers and scholars aged 12 and 15 were examined.

No arrangements have been made for providing treatment or for following up the defects found. The whole question of remedial treatment is left in the hands of the head masters and mistresses.

The tables referring to the inspection of Secondary Schools are given at the end of the report.

EXTENT AND SCOPE OF THE MEDICAL INSPECTION CARRIED OUT IN THE YEAR 1923.

137 schools were visited once only during the year.

109 „ „ „ twice „ „

74 „ „ „ three times „ „

26 schools were not visited during the year owing to the temporary absence of one Medical Officer.

TABLE I.—A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections.

Age ..				Entrants.					Total.
				3	4	5	6	Other Ages.	
Boys	4	1028	268	106	1406
Girls	1	953	277	93	1324
Totals	5	1981	545	199	2730

Age ..				Leavers.				Total.
				12	13	14	Other ages.	
Boys	..	..	..	1467	106	3	..	1576
Girls	..	..	..	1423	86	1	1	1511
Totals	..	..	..	2890	192	4	1	3087

			Intermediates	Other routine inspections.			
Age ..			8	9	10	11	Total.
Boys	..	..	1511	139	40	39	218
Girls	..	..	1505	123	24	22	169
Totals ..			3016	262	64	61	387

				GRAND TOTAL.				
				Entrants.	Inter- mediates.	Leavers.	Other routine inspections.	Total.
Boys	..	..	..	1406	1511	1576	218	4711
Girls	..	..	..	1324	1505	1511	169	4509
Totals	..	..	..	2730	3016	3087	387	9220

B.—OTHER INSPECTIONS.

				Number of Special Inspections.	Number of re-inspections.
Boys	..	..	..	328	6351
Girls	..	..	..	299	5901
Sex not given	..	..	..	1080	1982
Totals	..	..	..	1707	14234

TABLE II.—A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR
ENDED 31ST DECEMBER, 1923.

Defect or Disease.					Routine Inspections.		Special Inspections.	
					No. of Defects.		No. of Defects.	
					Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
(1) .					(2)	(3)	(4)	(5)
Malnutrition					1	803	..	19
Uncleanliness.. .. .					1554	..	6	
Skin ..	{ Ringworm—							
	Scalp				9	..	6	..
	Body				10	..	6	..
	Scabies				41	..	9	..
	Impetigo				38	..	20	..
Eye ..	{ Other diseases (non-tubercular) ..				39	2	9	..
	{ Blepharitis				62	19	16	5
	{ Conjunctivitis				7	..	4	..
	{ Keratitis .. .. .				..	..	..	..
	{ Corneal Opacities				1	..	1	..
	{ Defective Vision (excluding squint)				519	267	99	8
	{ Squint				88	43	17	4
	{ Other conditions				13	2	6	..
Ear ..	{ Defective hearing				41	3	22	..
	{ Otitis media				60	1	13	..
	{ Other ear diseases				1	2	1	..
Nose and Throat	{ Enlarged tonsils only				194	308	37	9
	{ Adenoids only				128	122	37	5
	{ Enlarged tonsils and adenoids ..				209	113	30	4
	{ Other Conditions				24	26	7	5
Enlarged Cervical Glands (non-tubercular)					5	94	4	6
Defective Speech .. .. .					..	48	..	7
*Teeth, Dental Diseases					36	..	2	..
Heart and Circulation.	{ Heart Disease—							
	Organic				11	76	1	4
	Functional				2	94	..	1
Lungs	{ Anaemia				35	44	13	4
	{ Bronchitis				19	46	2	2
{ Other non-tuberculous diseases ..					4	7

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TABLE II.—*continued.*

Defect or Disease.					Routine Inspections.		Special Inspections.	
					No. of Defects.		No. of Defects.	
					Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
(1)					(2)	(3)	(4)	(5)
Tuber- culosis	Pulmonary—							
	Definite				1	..	1	..
	Suspected				72	5	13	..
	Non-pulmonary—							
	Glands.. .. .				5	..	1	..
	Spine				2	..	..	..
	Hip				1	..	..	..
	Other bones and joints				4	1	..	..
Nervous system	Skin .. .. .				..	..	..	..
	Other forms				3	..	1	..
	Epilepsy				7	5	2	..
	Chorea				1	..	1	2
Deform- ities	Other conditions				1	2	..	..
	Rickets				7	6	..	..
	Spinal Curvature				60	16	7	..
Other forms					130	17	37	2
Other defects and diseases					210	465	42	46

* This only includes the grosser cases requiring immediate treatment, others being left over for routine treatment by the School Dentist.

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group.					Number of Children.		Percentage of children found to require treatment.
					Inspected.	Found to require treatment.	
(1)					(2)	(3)	(4)
Code Groups :—							
Entrants					2730	470	17.2
Intermediates and other routine inspections					3403	755	22.2
Leavers					3087	620	20.1
Total (Code Groups)					9220	1845	20.9

EYE DEFECTS.—These include defective vision, squint and external eye defects.

There were 723 children with defective eyesight and squint requiring treatment, and 322 with lesser degrees of defect that needed to be kept under observation. Of the children requiring medical treatment, 607 were belonging to the code groups, and 116 were special cases. The children aged 5 are not systematically examined for eyesight, so that the code group cases are mostly aged 8 and 12. The percentages amongst these cases needing medical treatment was 8.3. The pre-war percentages at the age of 12 were :—

Year	..	..	..	1908	1909	1910	1911	1912	1913	1914
Percentage of defects	..	..	..	15.5	14.7	13.3	11.8	14.5	18.2	19.4
Post-war percentages :—										
Year	..	..	..	1919	1920	1921	1922	1923		
Percentages of defects	..	..	..	10.0	10.2	8.5	7.6	7.5		

Leaflets for the use of teachers, parents and Health Visitors dealing with squint, myopia and aural defects were printed in last year's report, and reference can be made to that report for them.

Teachers are supplied with copies of the leaflet which emphasises the kind of teaching which should be given in school, and the Health Visitors and School Nurses are supplied with copies of the leaflets which are drawn up specially for the use of parents.

DEFECTS OF NOSE AND THROAT.—There were 666 children with defects of the throat and nose requiring treatment amongst those examined, and 592 children suffering from minor conditions and needing to be kept under observation. Of those requiring treatment 231 were suffering from enlarged tonsils, 165 from adenoids and 239 from both enlarged tonsils and adenoids.

Of the 9,220 children of the Code groups examined, 555 or 6.0 per cent., required medical treatment.

The degree of symptoms necessitating operation is a subject on which there is still considerable difference of opinion, and the proper selection of cases for operation is a matter requiring great care and judgment. More careful observations carried on into adult life of the cases operated on and those left without operation are most desirable and necessary. In the meantime probably the safest rule is to confine operations to cases in which there is distinct evidence of obstruction to breathing or of infection of the system.

At a conference of School Medical Officers held at the Shropshire Orthopaedic Hospital with the Medical Officers and Matron of the Hospital, it was generally agreed that the following was a fair statement of the conditions under which tonsils should be removed :—

(a) Those which are grossly hypertrophied, causing obstruction. (There must be a limit to the enlargement which is not considered pathological.)

(b) Those associated with persistent enlargement of the glands behind the angle of the jaw in the absence of oral sepsis (teeth, gums, etc.)

(c) Those, however small, from which can be expressed foul-smelling matter (although the crypts always contain micro-organisms, such contents cannot be passed as non-pathogenic—if “pus” is not a sign of disease here why should it be considered so in tooth sockets or accessory sinuses?).

(d) The tonsil “with a past”—frequent attacks of tonsillitis, “colds” always starting in the throat, past “quinsies”—although looking quiet and harmless when inspected.

(Extract from letter to the “British Medical Journal” of June 23rd, 1923, from Dr. J. B. Cavenagh, Worcester).

It was also agreed that the teeth should first be attended to where there was any considerable degree of dental decay or oral sepsis.

This conference was distinctly useful in getting something approaching uniformity in recommending operations on the throat.

Where there is any doubt and there are no urgent symptoms, it is probably better to leave over the operation until after a further inspection. Sometimes enlargement due to temporary congestion is mistaken for permanent enlargement. Such further inspection can often be arranged for in the course of a month or two at one of the Clinics.

TEETH.—For the last 10 or more years efforts have been made through the schools and by means of the health visitors to teach the prevention of dental caries on physiological lines. Simple rules of prevention have been drawn up and supplied to the schools and to the health visitors. The directions to the health visitor are to leave these at every house where there are young children and explain them. In addition lectures have been given by the medical staff to school teachers, to nurses, to mothers at the Child Welfare Centres and by the County Council health lecturer to the children at the schools.

This teaching is regarded as one of the most important duties of the health visitors. There is reason to think that there has been a considerable improvement in the teeth of the children of the County, but without some general acknowledgment of the supreme importance of the work it seems almost impossible to get that sustained interest and enthusiasm amongst the workers and that receptivity amongst the public that is essential for any great success.

What is wanted, is a real lead from the Government that this is work of great national importance, and Local Authorities, both Educational and Sanitary, should be encouraged to organise an intensive educational campaign.

It is eminently satisfactory to be able to record that the Society of Medical Officers of Health has drawn up a leaflet containing directions for the prevention of dental caries. This leaflet was drawn up by a committee composed of Dentists, School Medical Officers, Child Welfare Medical Officers and Medical Officers of Health, and may be looked upon as an authoritative statement.

The staff and conditions of working were as stated in the report for 1921.

The ends that have been steadily kept in view are :—

- (1) That the inspection should be of a *systematic* character.
- (2) That all the schools should be dealt with in a reasonable time, and if possible within twelve months.
- (3) That the mouth of every child treated should be freed from any gross septic conditions, and every decayed permanent tooth that is saveable, should be saved.
- (4) That subject to the foregoing conditions and to the proviso that every filling should be done as well as possible so that it shall be really permanent, the largest number of children possible should be dealt with.

The success or failure of the scheme must depend upon the amount of sepsis removed and the number of permanent teeth saved, and not upon the refinements of dental treatment.

In small country schools inspection and treatment are carried out at the same visit, and in those with less than 50 on the register, children of all ages were dealt with. In all other schools the scheme included all children of six years and over.

Since October, 1923, the children of all ages in the schools were dealt with. This is a very important advance.

Not only are all ages dealt with but the schools are now being visited about once in nine months. This frequency of visiting is due to two facts : the one is that there is a very considerable percentage of refusals, and the other is that those children who have been treated have now teeth which require very much less treatment than formerly.

All the schools were inspected and treated in 1923, with six exceptions.

Thirty-one schools were treated twice.

Thirty-three schools were inspected twice, but the second treatment was not given until 1924.

NUMBER OF CHILDREN DEALT WITH.

AGE GROUPS INSPECTED.													Specials.	Total.
Age	..	5	6	7	8	9	10	11	12	13	14			
East of County .. .. .	..	140	1473	1641	1732	1920	1860	1824	1708	1469	195	—	13962
(Mr. Birch)														
Remainder of County .. .. .	..	230	1528	1958	2079	2136	2098	2094	1989	1724	312	—	16148
(Mr. Keenan)														
		370	3001	3599	3811	4056	3958	3918	3697	3193	507	—	30110	
(b) Referred for Treatment .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	16392
(c) Actually treated .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	8869
(d) Re-treated (result of periodical examination) .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	not avail- able.

							No. of Children Referred for Treatment.											
							5	6	7	8	9	10	11	12	13	14	Total.	
Age ..																		
East of County							75	887	1001	1039	1115	1014	867	820	725	120		7663
(Mr. Birch)																		
Remainder of County							58	589	984	1213	1327	1234	1128	1024	988	184		8729
(Mr. Keenan)																		
							133	1476	1985	2252	2442	2248	1995	1844	1713	304		16392

NUMBER OF TEMPORARY TEETH DECAYED.

Age ..	SAVEABLE.										UNSAVEABLE.									
	5	6	7	8	9	10	11	12	13	14	5	6	7	8	9	10	11	12	13	14
East of County	204	1812	1717	1254	1209	791	433	182	52	2	110	2359	2786	2541	2399	1799	1112	601	347	25
Remainder of County ..	336	2297	3113	2803	2339	1736	949	395	182	18	119	1309	2296	2567	2641	1954	1351	688	341	49
	540	4109	4830	4057	3548	2527	1382	577	234	20	229	3668	5082	5108	5040	3753	2463	1289	688	74

NUMBER OF PERMANENT TEETH DECAYED.

Age ..	SAVEABLE.										UNSAVEABLE.									
	5	6	7	8	9	10	11	12	13	14	5	6	7	8	9	10	11	12	13	14
East of County	1	90	259	426	623	683	710	801	816	153	0	5	21	79	118	221	266	342	353	87
Remainder of County ..	0	63	215	396	427	656	750	855	960	188	0	10	48	162	252	380	542	653	877	178
	1	153	474	822	1050	1339	1460	1656	1776	341	0	15	69	241	370	601	808	995	1230	265

PARTICULARS OF TIME GIVEN AND OPERATIONS UNDERTAKEN.

No. of Half-days devoted to Inspection.	No. of Half-days devoted to Treatment.	Total No. of Attendances made by the Children at the Clinics and Schools.	No. of Permanent Teeth.		No. of Temporary Teeth.		Total No. of Fillings.	No. of Administrations of General Anaesthetics.	No. of other Operations.	
			Ex-tracted.	Filled.	Ex-tracted.	Filled.			Per-manent Teeth.	Temp-orary Teeth.
215	663	10505	2042	4265	14205	371	4636	1	1433	565

The number of unsaveable permanent teeth is the measure of the imperfection of the dental scheme. It is hoped in future reports to show with some exactness to what extent these unsaveable teeth are due to refusal of previous treatment, to what extent they are due to the length of time that elapses between the treatment, and to what extent they are due to the fact that the dentist is only able at one sitting to perform a certain amount of work on a child's mouth.

The difference between the number referred for treatment and the number treated was 7,523. The details are given in the following statement :—

	Refusals.	Absent on day of Treatment.	Left School.	To be treated in 1924.	Treatment deferred.
East of County	2336	335	7	924	74
Remainder of County ..	2496	300	37	918	96

It will be noted that there were no less than 4,832 refusals of treatment. The following table shows the schools in which the percentage of consents was very high and those in which it was very low. :—

PERCENTAGES OF "CONSENTS" FOR TREATMENT.

Acton Burnell	100 per cent.	Neen Savage	18 per cent.
Westbury Forest	100 "	Edgton	21 "
Lea Cross	100 "	Morda	26 "
Ford	100 "	Abdon	29 "
Adderley	98 "	Ludlow Undl.	30 "
Wroxeter	96 "	Shelve	30 "
Donington	95 "	Pant Glas	31 "
Moreton Corbet	95 "	Whitchurch Wes. Mixed	32 "
Lea Brockhurst	94 "	St. Martin's	33 "
Chetwynd	94 "	Middleton	33 "
Caynham	88 "	Clee St. Margaret	34 "
Bridgnorth Blue Coat ..	87 "	Bourton	34 "

It is, I think, a serious indictment of our educational system, although it has brought about great changes for the better, that after fifty years of universal education we should find a considerable percentage of the people ranging in different parts from 20 per cent. to 60 per cent. refusing dental treatment for their children, when skilled treatment is provided free of cost. We know that in the more highly educated classes dental treatment is sought after and obtained at much cost and inconvenience, and we may infer that the large majority of parents who refuse dental treatment do so because of a lack of development of their intelligence and their consequent inability to form a correct judgment on the serious problems of life. I would suggest seriously that the acceptance of dental treatment should be looked upon as a test of intelligence and consequently of success or failure of education in a district. A recognition of the value of such tests by education authorities as an indication of the quality of education in a district would help us much in our work.

Prevalence of Dental Caries.

The following tables show percentages of dental caries almost exactly the same as in previous years except at the age of five, where there is a slight increase. Whether or not this increase is an indication of an increased consumption of sugar since the war it is impossible to say at present. It is probably a fact however, that there is a grave danger of increased consumption of sugar and consequent damage to the teeth and health generally. A determined effort should be made to combat this danger.

The percentages of decay found by the dentists are smaller than those found by the Medical Officers, because they do not include the teeth that have been filled or extracted. Above the age of 7 these percentages are considerably lower than in previous years.

RESULTS OF ROUTINE INSPECTION BY THE MEDICAL INSPECTORS.

DISTRICT.	AGE 5.					AGE 8.					AGE 12.				
	Decayed Teeth.			Children free from Caries.		Decayed Teeth.			Children free from Caries.		Decayed Teeth.			Children free from Caries.	
	No. of Children.	Number.	Average per child.	Number.	Percentage	No. of Children.	Number.	Average per child.	Number.	Percentage	No. of Children.	Number.	Average per child.	Number.	Percentage
Dr. Blake	458	1943	4.2	100	22	772	3665	4.7	86	11	775	1592	2.1	204	26
Dr. Priestley	536	2111	3.9	129	24	724	2129	2.9	156	22	667	831	1.2	311	47
Dr. Taylor	358	1086	3.0	120	34	585	2437	4.2	102	17	551	1260	2.3	166	30
Dr. Symons	467	1200	2.6	186	40	668	1839	2.7	184	27	609	772	1.3	256	42
Dr. Evans	179	378	2.1	79	44	318	890	2.8	75	24	318	513	1.6	140	44
	1998	6718	3.4	614	31	3067	10960	3.6	603	20	2920	4968	1.7	1077	37

Results of Inspection by the Dentists.

Age	5	6	7	8	9	10	11	12	13	14
Average number of teeth decayed	2.1	2.6	2.9	2.7	2.5	2.1	1.6	1.2	1.2	1.4

TUBERCULOSIS.

Cases of phthisis amongst school children during the year were discovered in one of two ways: either in the examination of children referred by the teachers and nurses or picked out by the Medical Inspectors; or in the examination of children belonging to phthisis houses, all of whom are systematically examined by the Medical Inspectors.

Examination of Children from Phthisis Houses by the Medical Inspectors.

No. of Children belonging to phthisis houses.	Not yet examined.	No physical signs.	Phthisis. Suspected.	Phthisis. Diagnosed.
484	69	397	16	2

18

The 18 cases, together with 97 others picked out by the medical inspectors, teachers, nurses, etc., were referred to the Tuberculosis Officers.

Total number of School Children examined by the Tuberculosis Officers.

No. of Children.	No physical signs.	Phthisis. Diagnosed.	Suspected.	Other forms of Tuberculosis.	Left County.	Refused examination.
372	239	39	58	30	1	5

By these means all children known to have come into close contact with a case of pulmonary tuberculosis or showing any signs of failing health without obvious cause, and all school children with any suspicious signs of tuberculosis are brought before the Tuberculosis Officers. The new examination centres have been found most useful for this purpose.

GOITRE.

DISTRICT.		Boys.			GIRLS.			Total.
		Aged 5	Aged 8	Aged 12	Aged 5	Aged 8	Aged 12	
Dr. Priestley— Oakengates, Dawley, Madeley, Newport and Drayton.	No. of Children ..	318	386	345	306	375	339	2069
	Cases of Goitre ..	0	0	0	0	1	5	6
Dr. Blake— South of the County.	No. of Children ..	346	429	379	330	397	397	2278
	Cases of Goitre ..	8	15	40	6	26	77	172
Dr. Evans— Oswestry and Ellesmere.	No. of Children ..	144	248	235	155	176	159	1117
	Cases of Goitre ..	0	0	7	1	0	5	13
Dr. Symons— Wellington, Ironbridge, Broseley.	No. of Children ..	289	355	317	278	371	311	1921
	Cases of Goitre ..	0	0	2	0	3	2	7
Dr. Taylor— Atcham, Whitchurch, Bridgnorth, Wem	No. of Children ..	309	311	300	255	355	305	1835
	Cases of Goitre ..	1	1	10	0	5	18	35
Totals.		1406 9	1729 16	1576 59	1324 7	1674 35	1511 107	9220 233

The amount of goitre is shown in this table in the districts inspected by the different medical officers. As there is no standard of enlargement for the term 'goitre,' and as slight enlargement of the thyroid is sometimes temporary and can hardly be considered pathological, the amount of goitre recorded is to some extent dependent upon the personal factor of the examiner. This may account to some extent for the great excess in the southern part of the county. In this district the schools with the largest number of cases at the routine examinations were—Highley 21, Cleobury Mortimer 11, Claverley 8, Newcastle 7, and Lydbury North 6.

Sir George Newman has recently suggested that for the purpose of records, children should be classified as suffering from goitre where the "Thyroid is sufficiently enlarged for the increase in the size of the neck to be noticed on casual inspection (without measurement or palpation)."

It is now proved that the essential cause of goitre in a locality is the paucity of iodine in the soil and consequently in the water and vegetation. As the sea is the great source of iodine, this substance, speaking generally, diminishes in the soil with the distance from the sea and along with the decrease of iodine there is an increased prevalence of goitre. Even in goitrous districts McClendon has found that those persons, who drink milk of herbivorous animals freely, mostly escape.

This knowledge furnishes us with simple measures of prevention.

For a district with a common water supply the easiest method is to add iodine to the water. Unfortunately one has usually to add the iodine to about 80 times the volume of water that is drunk.

For areas without a common water supply the advocacy of the use of a table salt to which iodine has been added is perhaps the simplest prophylactic method. A specially prepared salt has been put on the market for this purpose. A person eating this salt in about an average amount would take three-quarters of a grain of iodide of potassium in a year. Experience in Switzerland seems to show that this amount is sufficient to prevent goitre.

A third method, which has the great disadvantage of not dealing with goitre in the adolescent or adult, is to give iodine in tablets or sweets to school children.

Of these three methods I am of opinion that the use of iodised table salt is the most universally applicable. It is very probable that this small amount of iodine added to the food in a goitrous district would prove generally beneficial, even to persons with no obvious goitre.

Heights and Weights.—The figures for heights and weights are again published after a lapse of ten years. They show very little variation compared with 1913, the last year published. The weights of the Shropshire children are practically the same as the weights recorded by the British Association for the Advancement of Science in 1883, except at the age of 12, the weights at this age being about 3 lbs. less.

For the sake of comparison the secondary school table is placed in juxtaposition to the elementary school table. The secondary school children are on an average 4 to 5 lbs. heavier at the age of 12, and 10 to 12 lbs. heavier at the age of 13. This difference is greater in the girls than in the boys.

Age.	Total No. of children measured and weighed at the various ages.	HEIGHTS.			WEIGHTS.			Measurements made by British Association for Advancement of Science in 1883.	
		Town Schools.	Country Schools.	Total.	Town Schools.	Country Schools.	Total.		
		Inches.	Inches.	Inches.	Lbs.	Lbs.	Lbs.	Hts.	Wts.
		Inches.	Inches.	Inches.	Lbs.	Lbs.	Lbs.	Inches.	Lbs.

BOYS.

5	1016	41.5	41.5	41.5	39.7	40.2	39.95	41.0	39.9
6	251	43.5	43.5	43.5	43.2	44.2	43.7	44.0	44.4
8	1492	47.5	47.7	47.6	51.5	53.3	52.4	47.1	54.9
9	125	49.1	49.4	49.25	55.5	56.8	56.15	49.7	60.4
12	1380	54.5	55	54.75	71.3	74	72.65	55.0	76.7
13	109	55.2	56.1	55.65	74.6	79.1	75.85	56.9	82.6

GIRLS.

5	890	40.9	41.3	41.1	37.6	38.8	38.2	40.6	39.2
6	253	43.2	43.2	43.2	42.3	42.9	42.6	42.9	41.7
8	1446	47	47.4	47.2	50.4	51.2	50.8	46.6	52.1
9	112	48.1	49.1	48.6	52.6	55.6	54.1	48.7	55.5
12	1356	54.9	55.5	55.2	72.5	75.6	74.05	55.7	76.4
13	79	57.1	56.6	56.8	75.7	82.7	79.2	57.8	87.2

SECONDARY SCHOOLS.

Ages.	No. of Children.	Boys.		No. of Children.	GIRLS.	
		Heights.	Weights.		Heights.	Weights.
		Inches.	Lbs.		Inches.	Lbs.
10	22	53	66.3	21	53.4	66.4
11	49	54.7	71.2	58	55	72.06
12	87	56	76.4	127	57.4	79.4
13	33	58.7	86	36	59.5	91.75
14	47	61	95.75	55	61.2	104.06
15	99	63	107.25	163	62.6	110.25
16	18	65	121.25	35	63.5	116.25
17	12	67.4	125.75	28	63.8	119.0

Malnutrition.—The figures compiled from the routine and special examinations do not show any particular increase or decrease compared with 1922.

As malnutrition in the County during 1921 and 1922 was most marked in the eastern district, particularly Oakengates, I have asked Dr. Priestley to let me have her remarks on this matter. She writes as follows :—

“ Although there was no school feeding in 1923, it is satisfactory to note that the nutrition of children of school age as a whole, showed an improvement as compared with the two previous years, the results of unemployment being less evident.

“ But a number of children still showed, as evidence of slight malnutrition, a lessened resistance to infectious diseases and minor skin diseases, and a tendency to develop slight postural deformities.

“ Cases of malnutrition under observation were not necessarily the result of poverty, the condition more often appeared after influenza, measles, whooping cough and diphtheria.

“ Few children were below average for weight and height.

“ In the opinion of Head Teachers in the District, there was less illness amongst the children and the percentage of attendances was more satisfactory than in the previous year.

“ The nutrition and mentality of the entrants (3½ yrs., 4 yrs., and 5 yrs.) was good, and showed a decided improvement as compared with years 1922 and 1921.

“ In my opinion the education of, and assistance given to the mothers at the Child Welfare Centres is resulting in general improvement of children of all ages, but is more evident in the younger children who have attended these Centres. The Child Welfare Committees assisted a number of ill-nourished children with Cod Liver Oil.

“ All necessitous families were referred to the local Relieving Officers and received immediate assistance.”

Mid-day Meals in Schools.—There has been no feeding of school children under the Provision of Meals Act during the year, because there has been no marked privation.

Another aspect of school meals is dealt with in Appendix B to this report, written by Dr. Symons.

Mid-day meals of the description there referred to are very beneficial, not necessarily on account of insufficiency of food, but on account of the general unsuitability of the food of a large proportion of the school children. The Committee might well consider this suggestion and see if it is possible to make arrangements of this kind fairly generally throughout the County, particularly in rural areas where a great many children stay at school for the mid-day meal.

I have frequently pointed out that a meal such as Dr. Symons describes as a common one for children to bring to school is extremely unsatisfactory, but could be made fairly satisfactory if the child had in addition about three-quarters of a pint of good fresh milk. This, of course, could be obtained and distributed with comparatively little trouble or organisation if it is found that the more elaborate hot meals are impracticable in any areas.

RINGWORM.—Of the children examined by the Medical Inspectors 10 were found to be suffering from ringworm of the scalp.

In addition, 160 cases have been notified by the teachers. These were not usually based on medical opinion.

Hairs were submitted to Birmingham University, with 71 positive results and 71 negative results.

When authorised by the School Medical Officer, children suffering from ringworm are now admitted to school, if the parent undertakes to carry out certain stringent precautions. It is also an essential condition of admission that the teacher shall undertake to see that the precautions are carried out.

Facilities have now been provided for the treatment of intractable cases of ringworm by a specialist in Birmingham. The railway fares are paid where the parents are not in a position to afford them.

During the year 5 cases were sent to Birmingham to be treated by Dr. Hall Edwards. All of these are apparently cured.

PEDICULOSIS.—The instructions given to the school nurses are to examine the heads of the children each term, that is three times a year, and to follow up the verminous children so as to get them clean before the end of the term. The inspection in the following term is to be begun *de novo*. So far as the returns show, there appear to have been 1,149 primary inspections and 1,694 following up inspections. At the primary inspections 87,280 children were examined and 7,845 were found verminous, or a percentage of 9.0.

These figures compare with 85,133 children examined in 1922, of whom 8,448 or 9.9 per cent. were verminous, and a percentage of 12.3 in 1921, and of 14 in 1920.

The following figures show the results of the examination of heads by school nurses. It must be remembered that on the second and subsequent inspections only those found verminous or absent at previous inspections are examined.

First Inspection.—Number examined 87,280. Verminous 7,845.

Subsequent Inspections:—

			2nd inspection.	3rd inspection.	4th inspection.	5th inspection.
Verminous	..	..	4204	1840	399	57
Absent	..	..	1267	673	193	20

The following paragraph which appeared in my last report has less application now that the inspection is done more thoroughly.

“ In interpreting these figures it must be borne in mind that in some schools a third inspection was not made, and in many there was no fourth or fifth inspection, so that the apparent decrease of verminous conditions is greater than the real decrease.”

These figures undoubtedly show real improvement. The time has now, however, arrived when verminous conditions can no longer be tolerated and when the procedure of separation in school, exclusion and finally prosecution should be strictly carried out in accordance with instructions. Proceedings in connection with the radically verminous children who are the source of the trouble should be commenced at the beginning of the term instead of waiting until the third inspection. These children should be well known now.

It has been the policy in the past to give every assistance and advice before prosecuting. Summonses have only been issued as a last resort. There can be no doubt, however, that prosecutions are an essential part of any scheme for getting the children's heads clean. Without them the really careless and dirty people will continue to be dirty and verminous and be a constant danger to the clean part of the school. There can be no doubt, too, that the new policy of proceeding to exclusion and prosecution in the essentially verminous cases at the beginning of the term is now the sound one.

Forty-nine children have been reported for prosecution under the Bye-Laws on account of verminous conditions. Proceedings were not taken in six cases owing to difficulties in arranging for evidence, removal to workhouse, etc.

Forty-three cases were taken into court and heard before the Magistrates at Market Drayton, Ironbridge, Pontesbury, Wellington, Shifnal, Baschurch, Condover and Newport. Fines were imposed in 36 cases, ranging from 3/9 to £1. Seven cases were dismissed, three on compassionate grounds, two owing to the Magistrates considering the evidence too old, and two cases were dismissed after several adjournments as the children were finally reported clean.

My general remarks in last year's report may be repeated with advantage. Their truth has been confirmed by further experience.

The prevention of verminous conditions depends upon :—

- (1) The influence and teaching of the teachers and their cordial and active co-operation with the school nurses.
- (2) The efficiency of the routine measures taken in the school by the school nurses.
- (3) The steps **taken** by the nurses and attendance officers, etc., outside the school to get the children clean and to punish neglectful parents.

These measures should extend so far as possible to other members of the household.

I am inclined to think that these three lines of action are placed here in their order of importance.

The influence of the Teacher on the cleanliness of the children was dealt with fully in last year's report, and this extract was forwarded to all the Schools in the County.

DULL AND BACKWARD CHILDREN.—One hundred and eighty-nine children were brought forward by the teachers as mentally dull, and were carefully examined by the Medical Inspectors. Eleven were diagnosed as mentally defective.

An analysis of the results of inspection of the 178 dull and backward children shows the following causes :—

Insufficiency of education	..	..	..	..	..	30
Physical defects—						
Adenoids and tonsils	..	..	..	..	..	11
Vision	..	..	..	..	..	6
Other defects	..	..	..	..	..	12
					—	29
Bad home conditions	..	..	..	..	..	24
Mental dullness (no apparent cause)			..	..	..	61
Family history of mental deficiency			..	..	..	6
No diagnosis of cause	..	..	..	..	..	26
Congenital causes	..	..	..	..	..	2
					—	178

The degree of retardation was estimated as follows :—1 year, 6 ; 1½ years, 6 ; 2 years, 96 ; 2½ years, 16 ; 3 years, 40 ; 4 years, 10. In four cases the degree was not stated.

Those retarded over three years come up automatically for special examination for mental deficiency.

One hundred and forty-seven children diagnosed dull and backward in 1921 and 1922 were re-examined this year. Three were diagnosed as mentally deficient ; of the others, 104 were found to have improved, 24 not improved, and in 16 cases no opinion was given.

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1923.

TREATMENT TABLE.
GROUP I.—MINOR AILMENTS.

Disease or Defect. (1)	Number of defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm—Scalp	98	41	139
Ringworm—Body	35	6	41
Scabies	33	8	41
Impetigo	405	13	418
Other Skin Diseases	135	41	176
Minor Eye Defects— (External, and other, but excluding cases falling in Group II.)	111	69	180
Minor Ear Defects	180	54	234
Miscellaneous— (e.g., Minor injuries, bruises, sores, chilblains, etc.) ..	699	62	761
Total	1696	294	1990

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I.)

Defect or Disease. (1)	Number of Defects dealt with.			
	Under the Authority's Scheme. (2)	Submitted to refraction by private practitioner or at Hospital apart from the Authority's Scheme. (3)	Otherwise. (4)	Total. (5)
Errors of refraction (including Squint)	665	68	33	766
Other Defect or Disease of the Eyes (excluding those recorded in Group I.)				
Total	665	68	33	766

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme ..	}	692
(b) Otherwise		

Total number of children who obtained or received spectacles :—

(a) Under the Authority's Scheme ..	}	660
(b) Otherwise		

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Defects.

Received Operative Treatment.			Received other forms of Treatment.	Total number Treated.
Under the Authority's Scheme, in Clinic or Hospital. (1)	By Private Practitioner or Hospital, apart from the Authority's Scheme.. (2)	Total. (3)		
240	75	315	80	395

FACILITIES FOR TREATMENT PROVIDED BY THE COUNTY COUNCIL.

At Hospitals—

- (1) For Eye, Ear, and Throat Defects—letters of recommendation provided for :—
Eye, Ear and Throat Hospital, Shrewsbury.
North Staffordshire Infirmary, Stoke-on-Trent.

- (2) For Deformities—

At Shropshire Orthopaedic Hospital—patients paid for under the tuberculosis scheme, and the scheme for the medical treatment of school children.

- (3) The Lady Forester Hospital at Broseley and the Bridgnorth and South Shropshire Infirmary—payment made for the operation for tonsils and adenoids. (No cases yet treated at Bridgnorth under these arrangements).

At Clinics or Schools—

Eye Clinic at Oswestry, attended by a practitioner—1/- paid by parents towards cost in each case.

Occasional Eye Clinics were held during 1923 at Whitchurch, Bridgnorth, Ludlow, and attended by an Assistant School Medical Officer—Dr. Taylor.

Clinics for minor ailments at Oswestry, Oakengates, Wellington, Whitchurch, Ludlow, Bridgnorth and Newport.

X-ray treatment of ringworm by a specialist at Birmingham.

Orthopaedic treatment at 14 After-care Centres provided by the Shropshire Orthopaedic Hospital.

The Orthopaedic Hospital with its After-care scheme has been the greatest possible help in the treatment of deformities of school children. By means of this scheme it has been possible to get prompt examination and treatment of every case where consent could be obtained.

DETAILS OF TREATMENT RECEIVED AT THE HOSPITALS AND CLINICS.

Treatment received at Eye, Ear and Throat Hospital for Shropshire and Wales, Shrewsbury, during the year, on Recommendations supplied by the County Council.

Eight hundred and twenty-three letters of recommendation were supplied and 800 of them have been used.

The results of treatment, so far as re-inspection has gone, are very satisfactory.

EYE DEFECTS.

Hospital or Clinic.	Number of Children seen.	Glasses prescribed.	Glasses obtained.	No. change of Glasses ordered.	Other treatment.	Visit to Salop Hospital advised.	No. glasses or treatment necessary.
Salop Eye, Ear and Throat Hospital	571	490	488	30	28	..	23
North Staffordshire Infirmary	2	1	1	..	..	..	1
Oswestry Eye Centre	46	45	40	..	..	1	..
Assistant School Medical Officer at Whitchurch Eye Clinic	21	21	19	..	..	..	..
Bridgnorth do.	38	37	36	..	..	1	..
Ludlow do.	19	19	18	..	..	..	..
Total	697	613	602	30	28	2	24

THROAT DEFECTS.

Hospital.	Number of Children seen.	Operated on.	Other treatment.
Salop Eye, Ear and Throat Hospital ..	168	161	2
North Staffordshire Infirmary	5	5	..
Broseley Hospital	13	13	..
Oswestry Cottage Hospital	22	22	..
Ludlow Cottage Hospital	2	2	..
Total .. .	210	203	2

The treatment for tonsils and adenoids at the Salop Eye, Ear and Throat Hospital has been limited during the year 1923 to four cases per week, to be sent in on a Wednesday. It has required very great care to get 168 children dealt with under these conditions, particularly as the Hospital was closed for the treatment of these cases for six weeks.

EAR AND NOSE TREATMENT.

Hospital.	Number of Children seen.	Received Treatment.			
		Remedied.	Im-proved.	Not Im-proved.	Not known.
Salop Eye, Ear and Throat Hospital	48	15	19	4	9

TREATMENT AT THE SHROPSHIRE ORTHOPAEDIC HOSPITAL.

Disease..	Cases paid for by the County Council.			Cases not paid for by the County Council.		
	Child Welfare, Tuberculosis and School Cases.			Child Welfare, Tuberculosis, School and other Cases.		
	Under 5	5 to 14	Over 14	Under 5	5 to 14	Over 14
Tuberculosis of Bones and Joints ..	12	30	53	..	1	4
Tuberculous Peritonitis .. ..	..	1	..	..	..	..
Poliomyelitis	4	12	..	1	5	2
Rickets	14	3	..	1	..	..
Knock Knee .. ..	..	1	..	..	..	..
Scoliosis .. ..	..	6	..	..	2	9
Kypho-Lordosis .. ..	..	2	..	..	1	1
Congenital Deformities	2	..	..	..	..	..
Flat Foot .. ..	..	2	..	1	1	3
Club Foot and Claw Foot	2	7	..	1	2	4
Osteo-Arthritis .. ..	..	..	..	..	..	1
Osteomyelitis	1	..	..	..	..	3
Osteo-chondritis .. ..	..	2	..	..	..	..
Epiphysitis .. ..	..	1	..	..	..	..
Arthritis .. ..	..	1	..	..	1	4
Spastic Paraplegia	2	3	..	1	..	..
Other Paralysis	1	4	..	..	3	1
Fractures and Dislocations	3	3	..	..	3	9
Functional Foot .. ..	..	..	..	..	..	1
Torticollis .. ..	..	2	..	..	..	1
Hammer Toes .. ..	..	1	..	..	..	..
Round Shoulders and Flat Feet .. ..	..	1	..	..	..	..
Fibro lipoma of back .. ..	..	1	..	..	..	..
Periostitis .. ..	..	..	..	..	..	1
Other Accidents .. ..	..	1	..	..	1	7
Other Diseases	2	2	..	..	..	7
	43	86*	53	5	20†	58
		182			83	
		Total 265				

* Includes 5 Shrewsbury School Children.

† Includes 8 Shrewsbury School children.

In all 265 cases have been treated at the Hospital, compared with 240 in 1922. So far as we are aware all the cases really needing treatment have been dealt with. This is very satisfactory. It is our constant endeavour to get the cases treated as early as possible.

Analysis of cases according to causation :—

101 or 38.1	per cent.	were due to	tuberculosis.
24	9.0	„	poliomyelitis.
17	6.4	„	rickets.
14	5.2	„	congenital deformities.
42	15.8	„	other deformities—postural or of doubtful causation.
12	4.5	„	injuries and diseases arising at birth.
17	6.4	„	infections other than tuberculosis.*
38	14.3	„	other accidents and diseases.

* Includes Rheumatoid Arthritis, Osteo-Arthritis and Osteo-Chondritis.

This classification of cases in accordance with causation is extremely instructive. Tuberculosis, rickets, postural deformities and infections other than tubercular must be looked upon as eventually preventable, and most of the conditions here mentioned are comparatively easily cured if got under treatment at the very beginning of the disease. This particularly applies to poliomyelitis, rickets, congenital deformities, and to a considerable extent it applies to cases of tuberculosis. The paralytic conditions arising from child birth are possibly also preventable. A systematic inquiry into these cases would well repay the trouble.

Many of the tuberculous cases come under notice after considerable damage has been done, the cause of the trouble not being recognised in the early stages.

Clinics for Minor Ailments.—The following table shows the work done at these Clinics :—

OSWESTRY CLINIC.

Defects or Diseases,	Children seen at Medical Inspection	No. of other Cases.	No. of attend- ances.	Result of Treatment.		
				Remedied	Improved	Unaltered
Skin :—						
Ringworm—head ..	7	12	183	11	8	..
Ringworm—body ..	..	6	30	6	..	..
Scabies	8	2	42	7	3	..
Impetigo .. ..	..	230	588	229	1	..
Minor Injuries ..	11	79	398	90	..	..
Other skin diseases ..	1	6	24	7	..	..
Ear Disease	10	62	206	64	8	..
Eye Disease (external and other)	9	13	36	19	3	..
Verminous conditions ..	..	108	192	108	..	..
Other conditions ..	..	46	81	41	5	..

OAKENGATES CLINIC.

Defects or Diseases.	Children seen at Medical Inspection	No. of other Cases.	No. of attend- ances.	Result of Treatment.		
				Remedied	Improved	Unaltered
Skin :—						
Ringworm—head ..	I	9	34	10	..	..
Ringworm—body ..	I	8	30	9	..	..
Scabies	I	4	21	5	..	..
Impetigo	I	65	375	66	..	..
Minor Injuries ..	..	31	85	30	I	..
Other Skin Diseases ..	..	13	34	11	2	..
Ear Disease	3	14	76	10	7	..
Eye Disease (external and other)	3	11	26	6	7	I
Verminous conditions ..	..	30	66	30	..	..
Other conditions	3	157	401	150	5	5

NEWPORT CLINIC.

Skin :—						
Ringworm—head ..	5	..	47	5	..	..
Ringworm—body ..	2	2	57	4	..	..
Scabies	I	..	6	I	..	..
Impetigo	10	7	170	17	..	..
Minor Injuries ..	5	19	212	23	I	..
Other Skin Diseases ..	7	8	137	15	..	..
Ear Disease	4	I	30	4	I	..
Eye Disease (external and other)	3	I	42	4	..	..
Verminous conditions ..	..	6	9	6	..	..
Other conditions	18	..	..	14	2	2

WELLINGTON CLINIC.

Skin :—						
Ringworm—head ..	..	10	39	8	2	..
Ringworm—body ..	I	7	23	8	..	..
Scabies	I	5	5	6	..	..
Impetigo	2	32	90	34	..	..
Minor Injuries ..	..	..	..	..	..	..
Other Skin Diseases ..	I	8	12	7	2	..
Ear Disease	8	10	39	14	4	..
Eye Disease (external and other)	6	24	34	26	4	..
Verminous conditions ..	..	4	4	4	..	..
Other conditions	15	117	218	83	47	2

WHITCHURCH CLINIC.

Defects or Diseases.		Children seen at Medical Inspection	No. of other Cases.	No. of attend- ances.	Result of Treatment.		
					Remedied	Improved	Unaltered
Skin :—							
Ringworm—head	..	I	I6	I5I8	I3	3	I
Ringworm—body	..	..	4	50	3	I	..
Scabies	.. ..	..	3	6	3	..	..
Impetigo	.. ..	..	II	98	II	..	..
Minor Injuries	.. ..	..	I8	60	I7	I	..
Other Skin Diseases	.. ..	..	2	7	..	..	2
Ear Disease	.. ..	4	6	253	2	5	3
Eye Disease (external and other)	.. ..	I	7	332	3	I	4
Verminous conditions	.. ..	..	3	I2	3	..	..
Other conditions	.. ..	I	I8	37	..	9	IO

LUDLOW CLINIC.

Skin :—							
Ringworm—head	..	..	5	I38	..	4	I
Ringworm—body	..	..	5	I4	5	..	..
Scabies	.. ..	2	2	I4	4	..	..
Impetigo	.. ..	..	20	72	20	..	..
Minor Injuries	.. ..	..	II	I9	II	..	..
Other Skin Diseases	.. ..	I	42	IO7	40	3	..
Ear Disease	.. ..	I	9	22	7	3	..
Eye Disease (external and other)	.. ..	..	II	26	IO	..	I
Verminous conditions	.. ..	..	3	IO	3	..	..
Other conditions	.. ..	3	I36	258	I23	I6	..

BRIDGNORTH CLINIC.

Skin :—							
Ringworm—head	..	3	9	2I3	IO	2	..
Ringworm—body	..	I	2	43	3	..	..
Scabies	.. ..	..	..	..	..	..	..
Impetigo	.. ..	4	20	5I6	22	2	..
Minor Injuries	.. ..	..	25	4I9	I9	6	..
Other Skin Diseases	.. ..	I	46	832	33	I4	..
Ear Disease	.. ..	2	4	I27	5	I	..
Eye Disease (external and other)	.. ..	70	5	323	49	4	22
Verminous conditions	.. ..	..	5	40	5	..	..
Other conditions	.. ..	69	25	366	58	I8	I8

Total for all Clinics, 1923	..	3I2	I640	IO034	I674	206	72
„ „ 1922	..	347	II26	8I97	II72	238	62

Statement showing visits of nurses in following up cases to bring about treatment :—

			No. of cases.	No. not visited	Total visits.
District Nurses	..	..	2934	492	5029
Two whole-time Nurses	..	..	583	43	2499
Health Visitors	..	..	1234	352	1562
Total	..	..	4751	887	9090

Action taken to detect and prevent Infectious Diseases, including reference to action under Articles 45 (b), 53 (b), and 57 of the Code of 1912.

A description of the scheme of notification of infectious disease from schools and of the measures taken to prevent the spread of infectious disease was given on pages 44, 45 and 46 of the report for 1914. This scheme is still in force.

All notifications of cases of measles in the schools are sent on to the Health Visitors, who make these cases the basis for further inquiries, give advice to the parent with regard to isolation and nursing and see that a doctor is called in if necessary. This work is carried out in close co-operation with the Medical Officer of Health of the District, to whom the Nurses report on individual cases.

All notifications of cases of infectious skin conditions are sent to the school nurses for them to give instruction and help to the parents in carrying out the routine treatment prescribed. Reports are required from the Nurses each month in cases of ringworm and in a fortnight in cases of scabies and impetigo. The cases are also notified to the Attendance Officers, who report any of them where the treatment is not being carried out or where the absence from school appears to be unduly prolonged.

All cases of sore throat where there is diphtheria in a school are sent to the School Nurse for swabbing, unless a special investigation is made by the Assistant School Medical Officer and in addition a letter is sent to the parent advising a doctor and pointing out the danger. Wherever a school is closed on account of diphtheria special forms dealing with diphtheria are sent to the Head Teacher to distribute one to each household.

During serious outbreaks of influenza, leaflets on the lines of that issued by the Ministry of Health are immediately forwarded to the school for distribution.

There can be no doubt that these various measures have a distinctly good educational effect.

Under Article 53 (b), 617 certificates of exclusion from school for infectious disease and other conditions have been sent in :—

121	on account of	impetigo.
25	„	ringworm of scalp.
35	„	ringworm of body.
61	„	scabies.
21	„	tuberculous glands.
65	„	suspected phthisis.
42	„	diagnosed phthisis.
4	„	tubercular peritonitis.
40	„	bronchitis.
6	„	anaemia.
34	„	debility.
35	„	verminous conditions.
73	„	mumps, chicken-pox, whooping cough, etc.
9	„	rheumatism.
8	„	chorea.
17	„	coryza.
7	„	heart conditions.
82	„	various causes.

School closure has been effected entirely under Article 45 by the School Medical Officer either on information obtained direct from the school, or on the advice of the District Medical Officer of Health. Under this Article, 170 schools were closed for the following reasons:— 37 for measles, 42 for whooping cough, 9 for scarlet fever, 3 for diphtheria, 14 for chicken-pox, 1 for mumps, 46 for influenza, 17 for colds, and 1 for impetigo.

There were no outbreaks of jaundice in the schools during 1923.

The only special reports made by the Medical Officers on outbreaks of infectious disease were two by Dr. Evans: (1) into the prevalence of scarlet fever at Chirk Bank School, (2) into an outbreak of skin disease of the nature of impetigo at Meverley School—prolonged and intensified by the absence of proper treatment. The action taken as a result of the reports seemed to have the desired effect.

In addition to these investigations, numerous visits were made by the Medical Officers and School Nurses for the purpose of swabbing children in connection with diphtheria.

Attention has previously been called to the practice of collecting the pens and pencils, mixing them and distributing them afresh each time instead of keeping one for each child. This certainly appears to be a very easy method of spreading diphtheria when it is present in a school.

REVIEW OF METHODS AND THE ADEQUACY OF SUCH METHODS FOR DEALING WITH BLIND, DEAF, MENTALLY OR PHYSICALLY DEFECTIVE AND EPILEPTIC CHILDREN UNDER THE ACTS OF 1893 AND 1899.

TABLE III.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA ON DECEMBER 31ST, 1923.

			Boys.	Girls.	Total.
BLIND (including partially blind), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.	Attending Public Elementary Schools		1	3	4
	Attending Certified Schools for the				
	Blind		2	3	5
	Not at School		1	1	2
DEAF AND DUMB (including partially deaf), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.	Attending Public Elementary Schools		2	3	5
	Attending Certified Schools for the				
	Deaf		7	6	13
	Not at School		1	2	3
Mentally Defective.	Feeble-Minded	Attending Public Elementary Schools	50	26	76
		Attending Certified Schools for men- tally defective children	13	7	20
		Notified to the Local Control Au- thority by Local Education Au- thority during the year	2	2	4
		Not at School	12	11	23
	Imbeciles	At School .. .. .	..	..	..
		Not at School	2	2	4
	Idiots	.. .. .	1	1	2
				
				
				

TABLE III.—*continued.*

			Boys.	Girls.	Total.
EPILEPTICS.		Attending Public Elementary Schools	31	17	48
		Attending Certified Schools for Epileptics	2	..	2
		In Institutions other than Certified Schools .. .. .	..	..	..
		Not at School	10	12	22
Physically Defective.	Pulmonary Tuberculosis.	Attending Public Elementary Schools	26	13	39
		Attending Certified Schools for physically defective children ..	..	1	1
		In Institutions other than Certified Schools	6	5	11
		Not at School	25	31	56
	Crippling due to Tuberculosis.	Attending Public Elementary Schools	30	22	52
		Attending Certified Schools for physically defective children ..	6	8	14
		In Institutions other than Certified Schools	1	2	3
		Not at School	14	18	32
	Crippling due to causes other than Tuberculosis, <i>i.e.</i> , paralysis, rickets, traumatism.	Attending Public Elementary Schools	168	156	324
		Attending Certified Schools for physically defective children	8	6	14
		In Institutions other than Certified Schools	1	1	2
		Not at School	42	31	73
	Other physical defects, <i>e.g.</i> , delicate and other children suitable for admission to open-air Schools ; children suffering from severe heart disease.	Attending Public Elementary Schools	82	90	172
		Attending Open-air Schools .. ..	..	..	..
		Attending Certified Schools for physically defective children, other than Open-air Schools	1	..	1
		Not at School	23	25	48

No child is included in this table except on a medical diagnosis. In previous years this was not the case.

Examination of Mentally Defective, Epileptic, Blind and Deaf Children.

	Certified suitable for Special School on Form 302M, 39, D. or 40 B.D.	Uneducable.	To be kept under observation.	Examined and found Dull and Backward only.
		Notified to Local Control Authority.		
Mentally Defective ..	37	10*	13	27
Epileptic	1	..	9	..
Blind .. ..	..	..	..	..
Deaf and Dumb ..	..	..	..	..

* 4 Imbeciles, 2 Idiots, 4 Mentally Defective Children.

The number of children admitted to special schools during 1923 was—Blind 0, Deaf and Dumb 2, Epileptic 1, Mentally Defective 4, Physically Defective 58.

The total number of children in special schools in 1923 was —Blind 5, Deaf and Dumb 13, Epileptic 2, Mentally Defective 20, Physically Defective 93.

There are two ways in which defective children are discovered, and these, when perfected, should result in all cases coming to our knowledge at a very early stage.

The one is the routine visits of health visitors which should not only reveal the grosser defects that make a child 'defective' in the sense here used, but the minor defects such as squint, adenoids, discharging ears and rickets, which need early treatment.

The other measure is the census of all children now taken by the Attendance Officers every year. This may at times be the means of discovering defects amongst boarded out children or removals into a district that had escaped the attention of the Health Visitor.

During the year 1923, the striking feature is the large number of mentally defective children attending the Public Elementary Schools. These to a considerable extent consist of children who have been certified for a special school, but either their parents object to their removal, or there is no available place at Sandlebridge for them. Others were considered too defective for Sandlebridge although to some extent educable.

The question has been considered as to whether it would not be better to notify these latter children to the Local Control Authority and put them under the supervision of the Health Visitors. The Board of Education is very loth to approve of the transference of any school child who is not an idiot or imbecile to the Local Authority under the Mental Deficiency Act.

Physical Training.

During 1923 it was decided to appoint an organiser of physical training for the County and the Borough of Shrewsbury combined. The conditions of appointment and working are as follows :—

1. The Woman Organiser of Physical Training will devote one day per week to work in connection with schools in the Borough of Shrewsbury and she will report thereon to the Borough Education Committee through the Borough School Medical Officer. The remaining days of the week will be devoted to work in other parts of the County under the direction and control of the County School Medical Officer through whom she will report.

2. The lady appointed will be required :—

- (i) To supervise the physical training of children in Public Elementary Schools in accordance with the syllabus of the Board of Education.
- (ii) To hold classes in physical training for Teachers.
- (iii) To perform such other duties as shall from time to time be entrusted to her by the Committee.

3. Candidates must have had a full training in, and possess the full Certificate of, a recognised Physical Training College.

I am glad to be able to state that the Organiser appointed, Mrs. Davey, has now been at work sometime, and I am sure at the end of the year it will be possible to give a most satisfactory account of her work.

In last year's report the following statement was made on the importance of physical training :—

“ In the introduction to this report I state that ‘ The outstanding want is still a comprehensive scheme for physical instruction and training.’ This is preventive work of a radical type. It not only prevents deformities, but it improves the health and physique of the great mass of school children. Upon sufficient exercise of the proper kind, conducted in the open air with due regard to the amount and kind of clothing, depends not only a good growth of the muscles and frame, but also the development of normal functions of the organs, an efficient heart, a freely moveable chest, good abdominal development, a good appetite, prompt riddance of waste produce, and a healthy condition of the mucous membranes and skin.”

“ Exercise and fresh air conditions and proper foods are the two primary factors that govern growth and health, and by attention to these two matters we strike at the root of disease. Measures directed to the prevention of particular diseases or to the early treatment of disease, although important, can never yield the same result to the State, consequently it is essential that we should concentrate our energies more particularly on these general measures, which are essential for the full growth and vitality of the great mass of school children. Of these measures, the provision of a good scheme of physical instruction including the encouragement of organised games and the provision of playing fields, is perhaps the most important. Unfortunately physical instruction is in some respects worse in this County than in 1914. *For these reasons I strongly urge that the scheme for the appointment of two organisers of physical training be proceeded with at the earliest practicable moment, and that in the meantime the acquisition of playing fields and organisation of games be encouraged and helped in every possible way.*”

I am so impressed with the importance of this branch of the work that I hope before long the County will appoint the two organisers as originally intended.

In addition to attending to the physical development of all the school children, which is infinitely the most important matter, the question of remedial exercises for children requiring them has received considerable attention.

Those children whose deformities are really serious are dealt with by admission for a period into the Orthopaedic Hospital. For the continuation of treatment in these cases and for the treatment of slighter cases it is most desirable that our School Nurses should work in close co-operation with the Orthopaedic After-care Centres in order that daily exercises may be carried out where necessary, and generally more attention given to this work than it is possible for the Orthopaedic Nurses to give.

If this scheme is carried out it means that School Nurses will have to receive some special training in remedial exercises. Such a scheme will deal to some extent with schools which are not within easy access of the Centres, and in these it appears probable that we shall have to rely to a considerable extent upon the teachers, who in their turn will receive instruction from the Physical Organiser. I hope next year to report that further progress has been made in the direction here indicated.

SECONDARY SCHOOLS.

A statement is given below as to the amount of inspection done at the Secondary Schools.

NUMBER OF CHILDREN INSPECTED.

A.—ROUTINE MEDICAL INSPECTIONS.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total.
Boys	1	6	2	12	11	32	57	107	47	64	115	23	16	5	1	499
Girls	3	8	3	9	12	30	78	182	47	63	204	39	32	19	3	732
Totals	4	14	5	21	23	62	135	289	94	127	319	62	48	24	4	1231

B.—SPECIAL INSPECTIONS.

Boys	12
Girls	26
	<hr/>
	38
	<hr/>

RE-EXAMINATIONS.

Boys	11
Girls	29
	<hr/>
	40
	<hr/>

RETURN OF DEFECTS (SECONDARY SCHOOLS).

Defect or Disease.						Routine Inspections.		Special Inspections.	
						No. of Defects.		No. of Defects.	
						Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
(1)						(2)	(3)	(4)	(5)
Malnutrition .. .. .						..	8	..	..
Uncleanliness						28	..	..	..
Skin	{	Ringworm—							
		Scalp				1	..	..	..
		Body .. .. .				..	..	..	..
		Scabies				2	..	..	..
		Impetigo				3	..	..	..
Other diseases (non-tuberculous)						9	..	2	..
Teeth, Dental Diseases						278	..	3	..
Nose and Throat	{	Enlarged Tonsils only				17	20	1	..
		Adenoids only				7	2	1	..
		Enlarged Tonsils and Adenoids ..				6	4	..	..
		Other conditions				4	1	..	..
Enlarged Cervical Glands (non-tuberculous)						..	4	..	..
Goitre						11	17	1	..
Eye	{	External Eye Disease				7	1	1	..
		Defective Vision (including squint)				85	24	8	..
Ear	{	Defective Hearing				13	..	..	..
		Otitis Media				5	..	..	..
		Other Ear Diseases .. .. .				..	..	..	..
Defective Speech .. .. .						..	3	..	1
Intelligence (backward) .. .. .						..	12	..	..
Heart and Circulation						5	12	..	1
Anaemia						4	4	1	1

Defect or Disease. (1)					Routine Inspections.		Special Inspections.	
					No. of Defects.		No. of Defects.	
					Requiring treatment.	Requiring to be kept under observation but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation but not requiring treatment.
					(2)	(3)	(4)	(5)
Tuber- culosis	{	Pulmonary—						
		Definite	
		Suspected	10	..	1	..		
		Non-Pulmonary—						
		Glands.. ..	..	..	..	..
		Spine .. ..	..	..	..	..
		Hip .. ..	..	..	..	..
		Other Bones and Joints ..	..	..	..	..
Lungs	{	Skin .. ..	..	..	..	..
		Other forms	1	..	..	..
		Bronchitis	1	..	..	..
Nervous System	{	Other non-tuberculous diseases	..	..	..	..
		Headache	1	4	..	2		
		Signs of Overstrain .. ..	..	1	..	..
Rheumatism	{	Chorea .. ..	..	1	..	..
			2	..	..	..
Digestion		.. ..	21	5	3	1	
Deform- ities	{	Spinal Curvature	9	25	..	1		
		Flat Foot	23	67	1	1		
		Other Deformity or Defect ..	26	18	5	1		
Remedial Exercises advised					79		0	
Number of individual children found at Routine Inspection to require treat- ment					245			

The County Council have not undertaken any responsibility for the treatment of these defects. A list of the defects is left with the Head Master or the Head Mistress of the School. An inquiry was recently made and the following is a summary of the replies received:—

	Defective Eyesight.	Tonsils & Adenoids.	Defective Hearing and Ear Disease.	Other Con- ditions.	Teeth.	Minor Deformi- ties.	Skin Disease.
Defects requiring treatment	.. 98	34	15	89	273	48	15
Defects treated	.. 58	13	7	60	109	29	9

Four hundred and eighty-nine individual children were advised to have treatment, and treatment was obtained for one or more defects in 259 cases.

APPENDIX A.

REPORT TO THE SCHOOL MEDICAL OFFICER BY MR. F. H. BIRCH, SCHOOL DENTIST,
EASTERN DISTRICT.

January 10th, 1924.

I beg to forward you my report for the year ending December 31st, 1923.

I took up my duties as Dental Officer on January 20th last, and since then have to record the resignation of one of the dressers—her place has been filled by one of the dressers from the other district of the County.

The fundamentals of the scheme have not been changed in essential during the year—except that more importance is being placed on propaganda work and general education amongst the masses where ignorance is still very rife, and it is confidently expected that with the rising of a new generation dental hygiene will not be merely regarded as a fad but as an important factor in health.

As regards treatment, recognizing the importance of gradual education as being of much more stability than over-drastic methods, efforts have been successfully directed to obtain a high percentage of healthy, functional mouths rather than to indulge in more specialised treatments.

The tooth-brush is not being urged as the panacea for all dental-ills, but as an adjunct requiring intelligent use; importance rather being placed on diet and masticatory exercise, indeed it is recognised that the over use of dentifrices and tooth-brush does more harm than good.

The condition of mouths generally points to great improvement, and this is not always shown by statistics, because in statistics we get no “degrees” of sepsis or caries but mere bare facts of numbers, so that individual opinion becomes important; the condition of the infants, however, is relatively bad because parents do not in many cases place the deciduous teeth in the order of importance which they should demand; only close co-operation by all authorities will stamp out the prevalence of ideas that first teeth fall out, etc., and especially should the co-operation of the physician who attends the expectant mother, and the child before school age, be secured; the power of the lay press in advertising patent medicines, etc., almost prompts us to consider that it could be used with great advantage in the form of lectures on simple physiology and hygiene.

It is now possible to complete inspection and treatment of this area about once every eight or nine months—this is very satisfactory, and the ideal would be about twice a year.

A system of payment has come into operation of late, but it is too soon to estimate what effect it will have on the scheme as a whole.

There is one fact that forcibly strikes one, and that is the need for following up treatment after school age, otherwise a lot of the good results are soon wasted—and in some districts such schemes are working with success; at present, dentistry is too much of a luxury to be appreciated by but a really small class of the general public.

On the all-absorbing question of dental caries and its prevention:—whilst recognising the influences of saliva-vitamines and abnormal endocrine glands, etc., the fundamental biological principle that each tissue and organ in the human organisation is capable of fulfilling its purpose is taken as a basis, and efforts are directed to the end that a more sensible view of feeding, etc., will ultimately prevail, believing that in dietetics, etc., will be found the real road to successfully grapple with the modern curse of decayed teeth.

I take this opportunity of testifying to the good work of the two dressers—although working under many anomalies, they have consistently worked conscientiously and at a high standard.

Finally I desire to thank you for your appreciation of the many difficulties which have to be contended with, working as it were with the bare necessities of accommodation, etc., and also for your much appreciated assistance in facilitating the work.

FRANK H. BIRCH, H.D.D., R.C.S., Edin., L.D.S., Liv.

A SYNOPSIS OF TREATMENT.

Generally speaking the treatment may be divided into—

(a) Prophylactic.

(b) Remedial.

Prophylactic measures are taught the children during inspection and during attendance at the Clinic, and the parents of the younger children are reached by means of pamphlets and by short lectures both individual and collective during attendance at schools for inspection of their children.

Of necessity, the dentist's time is more especially required for highly specialised remedial work, so that prophylactic propaganda devolves on school teachers, school doctors, nurses and health visitors.

At all times is the great importance of the deciduous teeth urged, and it is pointed out how caries of the deciduous teeth predisposes caries of the permanent teeth, and that by neglecting them on the assumption that, because they are there for comparatively but a short time they are unimportant, condemns the child to pain, ill-health and premature loss of teeth with accompanying ill-results.

Doubtless it is within the province of "Prevention" that hope for better conditions really exists, and to this end it is gratifying to notice the appointment of Dr. Sim Wallace as Lecturer on Preventive Dentistry to the Royal Dental Hospital.

Remedial.—The dentist must always go cautiously in his conception of ideals of treatment, he, being always as it were, somewhat of a shuttlecock—on one side being the party who advocate numerous and large extractions, and on the other, that party of sceptics who would maintain even unhealthy teeth on the principle of loss of masticatory power, etc. : especially must one in school dentistry proceed on very sane and sound lines, indulging in no theoretical methods.

Treatment therefore is on the grounds of restoration of function principally, with the ideal that the child shall leave school with a sound healthy mouth.

It is not considered that in Public Dental Service there is place for prophylactic Odontomy, but rather let us depend on systematic inspection and early treatment : in a few cases, however, the excision of abnormal sulci and grooves is carried out.

As regards temporary teeth, excessive extraction is not advocated—believing that cicatricial formation after removal is often a cause of malocclusion and unnecessary pain in the erupting of the permanent teeth ; efforts are made in the securing of self-cleansing areas, hardening of softened dentine by means of deposition of metallic silver per silver nitrate and of fillings in suitable cases : in the case of carious temporary molars, the extraction of the first molar has usually been attended by good results, the second molars becoming healthy and useful.

The permanent teeth are filled, stoned, etc., as far as it is safely possible, because the extraction of a permanent tooth is a real calamity, besides being an operation of importance to the child : under the ideal condition of inspection per every six months, the necessity for extraction and large fillings would become rare and rob dentistry of half its horrors to the lay mind.

The question of orthodontics is difficult, and only where extraction will cure overcrowding, etc., can anything be done, except in the way of advice or instruction to visit private practitioners : conditions of malocclusion seem to be increasing, and protruding canines are very often met with, together with narrowed, mouth-breathing type of arch.

Occasional cases of cleft-palate are met with and advised to attend the Birmingham Dental Hospital if possible, for mechanical treatment.

Anaesthetics are used for all but the very simplest of extractions, in the great majority of cases, local injections are used, both novocaine and cocaine solutions are used and have their individual advantages and disadvantages. Ethyl Chloride spray is used in the case of fairly loose temporary teeth.

General anaesthetics are only used at the Wellington Clinic, where conditions are better adapted for their use, and I take this opportunity of thanking Dr. Symons for his co-operation.

Speaking generally for school work, local anaesthesia seems to be preferable in this County, the children have a dread of losing consciousness, and a local also masks afterpain, besides controlling haemorrhage, and I cannot see how the danger of sepsis is really increased.

In the filling of permanent incisors, especially in girls, aesthetic conditions are appreciated, and in the great majority of cases, synthetic porcelains used as fillings.

Occasional root treatments are also done for older children.

It is noticeable that a mild catarrhal gingivitis due to mere lack of cleanliness is often present in the mouths of some of the older children, and after scaling and gum treatment the child is given a short lecture on the necessity for hygiene, and the best means of carrying out the essential personal treatment.

All treatment required is carried out completely and at more than one sitting if this is required.

The work of the dressers is under constant supervision, in accordance with the views of the Board of Education, and the Dental Board, and their work is in the direction of inspections, fillings and simple extractions.

APPENDIX B.

Mid-day Meals in Schools.

The basis of good health and a proper resistance to disease is founded on a balanced dietary, and healthy nutrition in children is determined not by the quantity but by the quality and constitution of the food consumed.

The weight and height of a child is not an infallible indication that all is well, for the simple reason that there may be an excess of fatty tissues and a relative deficiency of muscle and bone. This condition of affairs is most likely to occur when the diet is unbalanced and contains too great an excess of starchy and sugary foods—the enemies of the teeth.

From observation and common knowledge it is found that the children of the poor subsist largely on bread, jam, cake and potatoes—a diet of starch and sugar, with butter or margarine. Such a diet lacks in sufficient amount, the all important vitamins, salts and proteins, so necessary for healthy tissue growth and repair, which are to be obtained from fruit, vegetables, milk and fleshy foods.

For example, in one school it was found that of the 45 children eating their mid-day meal at school, 96 per cent. were consuming bread and butter or jam, and cake. These children had had the same type of meal for breakfast and would probably get the same again for tea.

It is therefore desirable to attempt to remedy the faulty diet not only to improve the physical state and, together with that, the mental state of the child, but also in the hope that it may have some educative use for the parents as regards food values.

In rural areas most children cannot get home to a good mid-day meal, and so bring large slabs of bread and butter or cake to eat, and nothing to drink.

If anything is brought to drink it is invariably strong tea in bottles or Thermos flasks.

Tea drinking is not to be encouraged in early childhood at any rate.

In a few schools they brew cocoa made with water.

We want to aim at establishing facilities whereby such children can obtain a simple nourishing meal (hot in winter) which shall contain as far as possible (1) vitamins and salts, (2) proteins, (3) fluid, which can be supplemented by smaller amounts of food (bread and butter) brought to school by themselves.

The type of meal suggested, easy to prepare, and cheap as regards its food value, is cocoa made with milk, or milk, or bone broth, or vegetable soups.

It ought to be feasible to start a scheme locally to suit each individual school, preferably a scheme worked by voluntary helpers in the town or village.

The scheme should be self-supporting by means of small contributions from the parents, and it is not desirable that Head Teachers, unless they offer to do so, should be burdened with this extra work or supervision.

For instance, there is one school in the County in which the children paid 1d. a week. They obtained hot cocoa made with milk three times a week.

This 1d. contribution paid for 75 per cent. of the cost of the cocoa and its preparation. A village woman made the cocoa at her house and brought it to the school—the payment of this woman, and any deficit on the scheme, being paid by an interested private individual.

Parents could easily provide each child with a cup or bowl and spoon, and the children could take it in turn to wash up afterwards.

A successful scheme on these lines was carried out during 1923 in the Isle of Lewis, the inhabitants of which are very poor. Of 61 children of 5 and 6 years of age not one was below 40 lbs. in weight. With the stoppage of this mid-day soup or cocoa 13 per cent. fell below. Similarly of 28 children of 12 years, only 2 were under 70 lbs. in weight and 50 per cent. fell below when the scheme was stopped owing to the inability of the parents to pay the necessary penny. School Medical Inspectors will be able to give advice regarding the constituents and methods of preparation of such meals as have been indicated, and can modify or improve matters in the different seasons of the year when they visit a school.

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